

AMENMENTS TO THE CLAIMS

COMPLETE LISTING OF THE CLAIMS

11. (Currently Amended) A catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate short distal tip which is coupled to an outer end of said distal portion, ~~and which is~~ said distal portion being made of a temperature responsive hardness memory material comprising radiopaque material selected from one of barium sulfate, bismuth subcarbonate or a metal powder compounded with a plastic thermoresponsive material modified or diluted with polyurethane resin to control the softening properties of the thermoresponsive ~~[tip]~~ material and said distal portion ~~having a temperature responsive hardness memory tip which is~~ being harder at temperatures below a critical temperature of approximately 31 degrees C and softer at temperatures above said critical temperature, said distal tip having a Shore hardness of 72-75 D at temperatures below said critical temperature for facilitating the pushing of said catheter into an introducing catheter and having a Shore hardness of 32-35 D at temperatures above said critical temperature, said distal tip also being made of a thermoresponsive polyurethane material and having a radio-opaque material therein, and said tubular body being coated with a jacket made of said plastic thermoresponsive hardness memory material.

12. (Original) The catheter assembly of claim 11 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.

13. (Original) The catheter assembly of claim 11 wherein said distal portion of said tubular body is tapered and said distal tip is welded on or molded on said tapered distal portion.

14. (Currently Amended) A catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate distal tip which is coupled to an outer end of said distal portion, ~~which has~~ said distal portion being made of a temperature responsive hardness memory ~~tip and material which is made of~~ comprising a radiopaque material selected from one of barium sulfate, bismuth subcarbonate or a metal powder compounded with a plastic thermoresponsive material which is modified or diluted with polyurethane resin to control the softening properties of the thermoresponsive ~~tip material and~~ material and which is harder at temperatures below a critical temperature of approximately 31 degrees C and softer at temperatures above said critical temperature, said distal ~~tip~~ portion having a Shore hardness of 72-75 D at temperatures below said critical temperature for facilitating the pushing of said catheter into an introducing catheter and having a Shore hardness of 32-35 D at temperatures above said critical temperature, said distal tip also being made of a thermoresponsive polyurethane material and having a radio-opaque material therein, ~~said distal portion of said tubular body being tapered and said distal tip being welded on or molded on said tapered distal portion of said tubular body.~~

15. (Currently Amended) The catheter ~~claim~~ assembly of claim 14 wherein said tubular body is coated with a jacket made of said thermoresponsive hardness memory material.

16. (Original) The catheter assembly of claim 14 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.

17. (Cancelled) ~~A catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate distal tip which is coupled to an outer end of said distal portion, which has a temperature responsive hardness~~

~~memory tip and which is made of a radiopaque material selected from one of barium sulfate, bismuth subcarbonate or a metal powder compounded with a plastic thermoresponsive material which is modified or diluted with polyurethane resin to control the softening properties of the thermoresponsive tip and which is harder at temperatures below a critical predetermined temperature and softer at temperatures above said critical temperature, and said tubular body being coated with a jacket made of said plastic thermoresponsive hardness memory material.~~

18. (Cancelled) ~~The catheter assembly of claim 17 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.~~

19. (Cancelled) ~~The catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate distal tip which is coupled to an outer end of said distal portion, which has a temperature responsive hardness memory tip and which is made of a radiopaque material selected from one of barium sulfate, bismuth subcarbonate or a metal powder compounded with a plastic thermoresponsive material which is modified or diluted with polyurethane resin to control the softening properties of the thermoresponsive tip and which is harder at temperatures below a critical predetermined temperature and softer at temperatures above said critical temperature,.~~

20. (Cancelled) ~~The catheter assembly of claim 14 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.~~

21. (Cancelled) ~~A catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate distal tip which includes~~

~~polyurethane and a radiopaque material selected from one of barium sulfate, bismuth subcarbonate or a metal powder compounded with a plastic and which is coupled to an outer end of said distal portion and said tubular body being coated with a jacket made of a plastic thermoresponsive hardness memory only material which is harder at temperatures below a critical predetermined temperature and softer at temperatures above said critical temperature and which is modified or diluted with polyurethane resin to control the softening properties of the jacket.~~

22. (Cancelled) ~~The catheter assembly of claim 21 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.~~

23. (New) The catheter assembly of claim 14 wherein said distal portion is tapered.